

Abstract

The power level of at least one forward-link signal is determined for a measurement interval, where the measurement interval has a duration smaller than or equal to the time period in which at least one power-indicative signal characteristic can change. For example, a power-indicative signal characteristic used can be the information rate of the signal, which can change once per frame. In this case the measurement interval would be smaller than or equal to a frame. Preferably, the measurement interval is smaller than the time period in which any of the power-indicative signal characteristics can change. The power level of the signal is based on the signal's power-indicative signal characteristics during the measurement interval. In one embodiment of the invention, the signal's power-indicative signal characteristics include the information rate, and the gain of the signal. The power-indicative signal characteristics can also include whether the information contained in a traffic signal is control information or voice and/or data information, whether the signal is setting up a call or is part of an established call, and whether the call is in a soft handoff. Each forward-link signal is a part of a signal set. The signal set can include: all or some of the signals corresponding to a sector of the cell containing the base station; or all or some of the signals amplified by the base station's amplifier. The power level of each signal that is in the signal set is summed to obtain the power level of the signal set.